IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Okamoto et al.

Serial No.: 10/568,616 Art Unit: 1796

Filed : February 16, 2006

Examiner : PENG, KUO LIANG

Title : CURING COMPOSITION WITH IMPROVED HEAT RESISTANCE

DECLARATION UNDER RULE 132

Honorable Commissioner of Patents and Trademarks,
Alexandria, VA 22313-1450

Sir:

I, Toshihiko OKAMOTO, a citizen of Japan and having postal mailing address of 1-19-19 Nonoue Akashi-shi Hyogo-ken 673-0017 JAPAN, declare and say that:

March 1994, I was graduated from the Graduate school of Engineering OSAKA University, and received a Master Degree in Engineering;

THAT I have been employed by Kaneka Corporation since April 1994, and now I am a researcher of modified silicone sealants;

I am an inventor of the invention disclosed in the instant application;

I have read the Office Action mailed and the references cited therein and am familiar with the subject matter thereof;

I respectfully submit herewith my exact report thereon;

In order to demonstrate excellent curability provided by a phthalate plasticizer, I have carried out

the following experiments. In these experiments, I have tested two different types of plasticizers. One is a phthalate plasticizer, which is a component of the claimed curable composition. The other is a non-phthalate-type plasticizer. Comparing the curability of two different curable compositions, I have demonstrated the advantageous effect of the claimed composition that contains a phthalate plasticizer.

[Experiment]

(Experiments 1 and 2)

A curable composition (Experiment 1), ingredients of which are listed in the following Table, was prepared in the same manner as Example 5 in the instant specification, except that non-phthalate plasticizer, PPG 3000 (diol type polypropylene glycol, molecular weight: 3000) was used as a plasticizer in lieu of DIDP (diisodecyl phthalate). Similarly, another curable composition (Experiment 2) was prepared in the same manner as Example 6 in the instant specification, except that PPG 3000 was used as a plasticizer in lieu of DIDP. Tack free times (TFT) of two comparative curable compositions were measured to evaluate their curability. The results are illustrated in the following Table.

The organic polymer (A-1), as the (A) component, means the organic polymer obtained in the Synthesis Example 1 of the present invention.

For comparison, the results of Examples 5 and 6 in the instant specification are copied in the Table.

Table

Compositon (Parts by weight)			Example 5 *	Example 6 *	Experiment 1	Experiment 2
Component (A)	A-1		100	100	100	100
Filler	Hakuenka CCR		120	120	120	120
Titanium Oxide	Tipaque R-820		20	20	20	20
Plasticizer	DIDP		55	55		
	PPG 3000				55	55
Thixotropic agent	Disperlon #6500		2	2	2	2
Photostabilizer	Sanol LS-770		1	1	1	1
UV absorber	Tinuvin 327		1	1	1	1
Antioxidant	Irganox 1010		1	1	1	1
Dehydrating agent	A-171		2	2	2	2
Adhesion-imparting agent	A-1120		3	3	3	3
Tin carboxylate	Neostan U-50		5	3.4	5	3.4
Carboxylic acid	Versatic 10			1.2		1.2
Amine	Farmin 20D		0.75	0.75	0.75	0.75
Curability	Tack-Free time	min	20	25	35	40

* Examples described in the instant specification

[Results of the Experiments]

As illustrated in the Table above, a phthalate plasticizer (DIDP <Examples 5 and 6 in the instant application>), as a plasticizer of the claimed curable composition, provides excellent curability to the curable composition. The tack-free time of the claimed curable composition (Example 5 or 6) is shorter than that of the curable composition of Experiment 1 or 2, which contains a non-phthalate plasticizer, PPG 3000. Thus, phthalate plasticizers are more advantageous for the curable composition of the present invention than non-phthalate plasticizers in curability.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of

the application or any patent issued thereon.

Signed this 22th day of September, 2010

Toshihiko Okamoto

Toshihiko OKAMOTO